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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant: Richey, et al.

Examiner:

Serial No.:

Group Art Unit:

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Date: October 24, 2000

For: OXYGEN CONSERVING DEVICE UTILIZING A RADIAL MULTI-STAGE COMPRESSOR FOR HIGH-PRESSURE MOBILE STORAGE

Assistant Commissioner for Patents
Washington, D.C. 20231

INFORMATION DISCLOSURE STATEMENT

Sir:

This invention relates to an oxygen concentrator is utilized in combination with a compressor, preferably a radial compressor, to provide a highly enriched and compressed oxygen gas in a mobile container such as a gas cylinder. The combination and method of production provides for the facile preparation of an enriched source of oxygen for use by an ambulatory or wheelchair-confined patient.

The oxygen concentrator utilizes two or more molecular sieves to provide a breathable gas of at least about 85% or 90% oxygen from atmospheric air. The oxygen-enriched gas can be stored in a buffer tank and prioritized so as to supply a patient with a proper amount and concentration of oxygen and secondarily to supply an amount of the enriched oxygen to a compressor. The radial compressor utilizes multiple stages to produce the highly compressed oxygen-enriched gas and has radially arranged pistons. The radial compressor is compact and lightweight.

As authorized and encouraged under 37 C.F.R. §1.97-1.99, applicant hereby cites as a means of complying with the duty of disclosure set forth in 37 C.F.R. §1.56, the following patents and/or documents, copies enclosed, which the Examiner should consider with respect to the above-identified United States Patent Application:

10/24/00
JC3205612 PRO

PATENT/DOCUMENT NO.	DATE	NAME/COUNTRY
2,944,627	February 12, 1958	Skarstrom
3,313,091	April 11, 1967	Berlin
3,898,047	August 5, 1975	Cramer
3,964,866	June 22, 1976	Shelby
4,013,429	March 22, 1977	Sircar et al.
4,194,890	March 25, 1980	McCombs et al.
4,222,750	September 16, 1980	Gauthier et al.
4,263,018	April 21, 1981	McCombs, et al.
4,331,455	May 25, 1982	Sato
4,349,357	September 14, 1982	Russell
4,428,372	January 31, 1984	Reysel, et al.
4,449,990	May 22, 1984	Tedford, Jr.
4,516,424	May 14, 1985	Rowland
4,552,571	November 12, 1985	Dechene
4,576,616	March 18, 1986	Mottram, et al.
4,610,700	September 9, 1986	Miller, et al.
4,627,860	December 9, 1986	Rowland
4,636,226	Janury 13, 1987	Canfora
4,670,223	June 2, 1987	Delachapelle
4,673,415	June 16, 1987	Stanford
4,698,075	October 6, 1987	Dechene
4,706,664	November 17, 1987	Snook, et al.
4,765,804	August 23, 1988	Lloyd-Williams, et al.
4,844,059	July 4, 1989	Koch
4,867,766	September 19, 1989	Campbell, et al.
4,869,733	September 26, 1989	Stanford
4,880,443	November 14, 1989	Miller, et al.
4,905,685	March 6, 1990	Olsson, et al.
4,922,900	May 8, 1990	Kiske, et al.
4,991,616	February 12, 1991	Fabregat
5,071,453	December 10, 1991	Hradek, et al.
5,144,945	September 8, 1992	Nishino, et al.

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PATENT/DOCUMENT NO.	DATE	NAME/COUNTRY
5,163,978	November 17, 1992	Leavitt et al.
5,195,874	March 23, 1993	Odagiri
5,199,423	April 6, 1993	Harral, et al.
5,207,806	May 4, 1993	Lagree, et al.
5,237,987	August 24, 1993	Anderson, et al.
5,354,361	October 11, 1994	Coffield
5,474,595	December 12, 1995	McCombs
5,584,669	December 17, 1996	Becker
5,593,478	January 14, 1997	Hill, et al.
5,704,964	January 6, 1998	Kaneko, et al.
5,730,778	March 24, 1998	Hill, et al.
5,858,062	January 12, 1999	McCulloh, et al.
5,893,944	April 13, 1999	Dong
5,988,165	November 23, 1999	Richey, II, et al.
FOREIGN DOCUMENTS		
374 540A	June 16, 1932	GB
860 647 A	August 26, 1998	EP

Copies of the publications are included for the express purpose of providing the Patent and Trademark Office with an ample opportunity to evaluate the same and to arrive at an independent assessment of their materiality, if any, with regard to the examination of the application.

In reviewing the enclosed copies of the above publications, the Examiner is requested to ignore any underscoring or highlighting which may appear because such markings may or may not have any relationship to the subject matter of the above-identified application. The copies being submitted with this Information Disclosure Statement are the best copies available at this time.

An examination of the present application considering the above documents is requested.

Respectfully submitted,

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